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NATURAL NUTRITIOUS KIWI FRUIT BEVERAGE  
[Mi hou tao tian ran ying yao kou fu ye]

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## Claims

1. A natural nutritious kiwi fruit beverage, characterized by the fact that said beverage contains kiwi fruit, jujube (date), carrot, and honey as its ingredients, and the percentage of the various ingredients by weight is:

Kiwi fruit	50-80%
Jujube	1-20%
Carrot	2-18%
Honey	2-12%
Sum of the various components	100%

2. The process for preparing the natural nutritious kiwi fruit beverage as described in Claim 1, characterized by the following steps:

(1) Pre-treatment of kiwi fruit, jujube, and carrot, wherein through beating and filtering, their extract is ready for compounding;

(2) The extract of kiwi fruit, jujube, and carrot mentioned above and honey are blended with filtered distilled water, agitated, and ground;

(3) The blended beverage is sterilized with ultraviolet rays, bottled, and then pasteurized, and the finished product is packed.

## Description

The present invention relates to a beverage, particularly to a nutritious beverage with kiwi fruit as the primary ingredient.

Currently there is a variety of beverages. One kind is medicinal, used directly for treatment of illness. There is another kind that belongs to nutritious healthcare products, which can be used to replenish

nutrients human body requires and may have certain functions of prevention, control and adjuvant therapy for some illnesses.

Kiwi fruit is known as the “king of fruit” in numerous classifications of fruit, and there are rich nutrients contained in its fruit, as there is 100-400 mg of Vitamin C per 100 g of its fresh fruit, which is equivalent to 8 times of orange and 30 times of apple, and the utilization efficiency of its Vitamin C in the human body can be as high as 94%. Furthermore, kiwi fruit also contains 18 kinds of amino acids, carotenoid, pectin, crude cellulose, and inorganic salts of calcium, magnesium, potassium, sodium, etc., and micro elements such as iodine, manganese, zinc, selenium, molybdenum, iron, germanium, chromium, etc. Our country is a place of origin of kiwi fruit, rich in its resources. Kiwi fruit is of high value for comprehensive utilization. Its fruit can be eaten fresh, yet can also be processed to become various kinds of food such as juice, jam, preserved fruit, and fruit slices, and currently, there are over 50 kinds of kiwi fruit food available, but a kiwi fruit beverage is not yet available.

The purpose of the present invention is to develop a new field of application for kiwi fruit, wherein it is prepared to be a natural nutritious kiwi fruit beverage, to meet the demand of the human body for multiple nutrients, and also to be used for prevention and control of illnesses, and it is very convenient for people to drink, carry, and preserve.

The natural kiwi fruit beverage provided by the present invention is one with kiwi fruit as the primary ingredient and also contains jujube (date), carrot, and honey, and the percentage of the various ingredients by weight is: kiwi fruit 50-80%, jujube 1-20%, carrot 2-15%, and honey 2-10%.

(1) Preparation of the natural kiwi fruit beverage provided by the present invention goes through the following steps:

(2) Pre-treatment of kiwi fruit, jujube, and carrot, wherein through beating and filtering, their extract is ready for compounding;

(3) The extract of kiwi fruit, jujube, and carrot mentioned above and honey are blended with filtered distilled water, agitated, and ground;

The blended beverage is sterilized with ultraviolet rays, bottled, and then pasteurized, and packed to become a finished product.

The natural kiwi fruit beverage prepared through the present invention has gone through determination of the nutrients and micro elements and heavy metals, and the results are as follows:

Determination of the nutrients (1)

① 营 养 成 分	② 单 位	③ 含 量
④ 维生素 E	mg / 100g	0 . 2 0
维生素 B <sub>1</sub>	mg / 100g	微 量
维生素 B <sub>2</sub>	mg / 100g	微 量
维生素 C	mg / 100g	1 8 . 4
胡萝卜素	mg / 100g	0 . 0 2

Key: 1      Nutrients

2      Unit

3      Content

4      Vitamin E

Vitamin B1

Vitamin B2

Vitamin C

Carotenoid

5      Micro

Determination of the nutrients (2)

① 营养成分	② 含量 (mg/100g)	① 营养成分	② 含量 (mg/100g)
③ 天门冬氨酸	5.2	④ 蛋氨酸	6
苏氨酸	1.2	异亮氨酸	1.0
丝氨酸	1.3	亮氨酸	1.3
谷氨酸	5.8	酪氨酸	1.3
脯氨酸	5.0	苯丙氨酸	2.5
甘氨酸	1.2	组氨酸	2
丙氨酸	1.9	赖氨酸	5
胱氨酸	8	精氨酸	2.1
缬氨酸	2.9	色氨酸	5

- Key:
- 1 Nutrients
  - 2 Content (mg/100 g)
  - 3 Asparagic acid
  - Threonine
  - Serine
  - Glutamic acid
  - Proline
  - Glycerine
  - Alanine
  - Cystine
  - Valine
  - 4 Methionine
  - Isoleucine
  - Leucine

Tyrosine

Phenylalanine

Histidine

Lysine

Arginine

Tryptophane

Determination of the content of micro elements:

① 测定项目	② 含量 (mg/L)	① 测定项目	② 含量 (mg/L)
③ 铁	2 . 0 4	⑤ 锰	0 . 0 9 0
锌	0 . 8 4	铬	0 . 0 0 1 4
铜	0 . 2 1 9	锡	0 . 0 1 2 6
镍	0 . 0 1 7	硒	0 . 0 0 4
锗	< 0 . 0 0 6 4	钴	< 0 . 0 0 1 9
硅	500 以 SiO <sub>2</sub> 计④	钼	< 0 . 0 0 2 3
碘化物	1 . 3 5	砷	< 0 . 0 0 7 0
氟化物	2 . 0 0		

Key: 1 Items determined

2 Content (mg/L)

3 Iron

Zinc

Copper

Nickel

Germanium

Silicon

- Iodide
- Fluoride
- 4 500 calculated by  $\text{SiO}_2$
- 5 Manganese
- Chromium
- Tin
- Selenium
- Cobalt
- Molybdenum
- Vitriol

#### Determination of heavy metals:

Lead is no more than 4.1 mg per kg (1000 mL) of the product, the content of mercury is lower than 100 mg, and the content of arsenic if lower than 500 mg.

An experiment on its anti-mutagenic action indicates that the inhibitory efficiency of the natural nutritious kiwi fruit beverage on nitrosoguanidine reaches 57.8%, its inhibitory efficiency on aflatoxin reaches 77.8%, and its inhibitory efficiency on benzopyrene is 48.0%.

The advantages of the present invention are that containing 18 amino acids, carotenoids, multiple vitamins and micro elements required by the human body, it can promote children's growth and intelligent development and enhance immunization of the body, while also containing anti-aging and anti-carcinogenic functions, and has pretty good effects of prevention, control and adjuvant therapy on many diseases such as cardiovascular disease, diseases of digestive tract, hepatitis, etc.



The natural nutritious kiwi fruit beverage of the present invention has an extensive source of the raw material, simple production process, and low cost.

Provided below are a number of examples of the present invention.

#### Example 1

No. 1 Formula of the natural nutritious kiwi fruit beverage:

Kiwi fruit 60%, jujube 15%, carrot 14%, and honey 11%

Method of preparation:

Kiwi fruit, jujube, and carrot, after pre-treatment of cleaning and peeling, and beating and filtering, are blended with honey in accordance with the percentage of the formula mentioned above, added with distilled water, agitated, ground, and sterilized under illumination of ultraviolet rays for 30 min, put into a 10 mL bottle, and the pasteurized (atmospheric pressure, 65°C, irradiant disinfection) for 3 h, and the finished product is packed.

#### Example 2

No. 2 Formula of the natural nutritious kiwi fruit beverage:

Kiwi fruit 80%, jujube 10%, carrot 5%, and honey 5%

The method of preparation is the same as in Example 1.

#### Example 3

No. 3 Formula of the natural nutritious kiwi fruit beverage:

Kiwi fruit 72%, jujube 5%, carrot 17%, and honey 6%

The method of preparation is the same as the examples mentioned above.

